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## FIFTEEN YEARS' OBSERVATION AMONG BEER-DRINKERS.

BY

LAMBERT OTT, M.D.,



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## FIFTEEN YEARS' OBSERVATION AMONG BEER-DRINKERS.

BY LAMBERT OTT, M.D., of Philadelphia.

THE manufacture of beer requires the laboring brewer to expose himself to various temperatures ranging from 90° F. to a cold and damp cellar at the freezing-point, although it is not often that one man works in different departments in one day, the members of each gang usually having more or less continuous work at one job, to which they are confined by reason of their experience and training.

It may happen that one man, passing from the "brew-house" through the fermenting-room, thence through the beer storage rooms, cooled by an ice-machine, passes through a varying temperature having the extremes of 100° F. and freezing. In a healthy young adult, not undermined by excesses, and protected by ample clothing, no untoward results follow.

The majority of laborers in a brewery are Germans, with a sprinkling of Irish and a few Americans. The German brewer is by nature an honest, industrious, and good-natured individual, fond of his home and family, and in every way a congenial person; even the Irish and American brewer partakes of those kind and congenial

elements so common to the German brewer, leading one to believe that the constant association and use of beer as a beverage begets a distinctive type of humanity, possessing natures kind and pleasing. The physical peculiarities are a florid complexion, due in many cases to capillary varicosity, and a tendency to the accumulation of fat. Often have I observed young men, of slight build, with no inherited predisposition to obesity, after a vear or two in a brewery, acquire a sunny disposition and an accumulation of fat, the attenuated and introspective dyspeptic being transformed into the happy and fat brewer. In rare cases idiosyncrasies are apparent, in which a small and bony individual refuses to acquire fat, even after excessive libations of beer. It is not easy to explain this difference, but those possessing this peculiarity are of a vicious inherited tendency, carrying a diathesis which at an opportune time develops some irremediable ill.

The blood of the beer-drinker—I use the term as applied to men constantly employed in breweries, and drink nothing but beer—shows microscopically an increased proportion of red corpuscles and a diminution of white corpuscles. An inveterate beer-drinker, suddenly ceasing his drinking, suffers no special inconvenience beyond the natural longing, which is of short duration, besides a rapid loss of flesh—I should say redundant flesh—a decline of his florid color, which is soon replaced by a paler hue, but at no time approaching the pallor of anemia. Those consuming large quantities of beer daily, and eating very little food, after a time become

stupid, dull to their surroundings, and only aroused from this semi-drowsiness by a fit of anger or an exciting incident; but this mental torpor is only temporary, disappearing as soon as the habit is corrected. When an abnormal condition is caused by excessive beer-drinking, the sudden abstention does not prevent a rapid return to the norm, this fact standing in marked contrast to what occurs to the whiskey-drinker.

I have to differ with the opinion of some writers on stomach-diseases that beer retards digestion, notably Osler, in his recent Practice, who otherwise is so clean-cut and select in his therapeutics. Germans consume three and four large glasses of beer daily with their luncheon or dinner, and I have never yet heard or seen complaints of indigestion, whereas with the use of other alcoholic potations during meals it is different. I have examined the vomit of the whiskey-drinker after having been in the stomach five or six hours, and no indication of chymification of the ingested food was evident. Another peculiarity of the beer-drinker is the enormous bladder-capacity he acquires, passing at one time as much as one quart or more of urine. Stone in the bladder and cystic diseases are exceedingly rare.

Among the pathologic conditions produced by excessive libations of beer, foremost is *subacute gastritis*. This disease is most prevalent in the summer months. Among one hundred cases noted, seventy-eight occurred during the months of June, July, and August. The cause is the pouring of cold beer into an empty stomach; but I have observed this impor-

tant point, that those suffering from gastric trouble, for the most part, took their morning "Schnapps," with a half-dozen drinks interspersed between their drinks of beer. Those confining their drinking entirely to beer suffer less, especially when taking their beverage after or during a meal, and in warm weather avoiding large draughts of cold beer when overheated or into an empty stomach.

The few prominent and ever-present symptoms of this variety of subacute gastritis are: great lassitude, total loss of appetite, vomiting of all food, vomiting of mucus mixed with bile, particularly in the morning; heavy, dull pain in the epigastrium, and a swollen, beefy tongue, with highly red edges. These patients, further, complain of weakness, headache, nausea when smelling cooking, seldom fever, rarely a sub-lingual temperature of 100° F., tenderness over the stomach, relaxation of the bowels, profuse perspiration on slight exertion, and palpitation of the heart. There is extreme nervousness, sometimes sleeplessness, and, what is peculiar, an aversion to all drinks. The urine is scanty, highcolored, and shows a heavy deposit of urates. There is one symptom in particular which the brewer complains of when visiting your office, and that is great lassitude. If on further inquiry you find no fever and an aversion to food, one can invariably conclude the case to be one of subacute gastritis. Often there is complaint of such complete prostration and an expression of a fear of typhoid fever developing; but the trouble is gastric and of short duration. The absence of pyrexia at once excludes a continued fever. The duration of the attack is from three to

seven days, much depending upon the care the patient takes of himself.

The prognosis is favorable.

In treatment absolute rest in bed is to be insisted upon, with total abstinence from all stimulating drinks; liquid and easily digested diet, including hot milk, hot barley-water and rice-water, beef-tea, hot soups, etc., is to be ordered; and when hot drinks are objectionable cold drinks may be permitted. Milk should be taken with care, slowly sipped, and holding a quantity in the mouth before swallowing; otherwise in most cases it curdles and is rejected. Counter-irritation by means of an application of mustard to the stomach until the skin is permanently reddened is also useful, and the internal administration of the following prescription, in conjunction with the foregoing regimen, I have found a specific:

R.—Bismuthi subnit. . . . . . 3vj Sodii bicarb. . . . . . . . . . . 3j.

M. et div. in chart. no. xij.

Sig.—One powder every two or three hours, preferably on an empty stomach,

For the aggravated thirst I order Vichy or Seltzer water alone, or in case of decided weakness, with equal parts of Rhine or claret wine. In from three to five days convalescence sets in, as evidenced by the return of the appetite, cleaning of the tongue, and a disappearance of the weakness; at this time it is all-important to forbid any malt or spirituous liquors, even a small potation causing an exasperating relapse.

Among two hundred brewers examined as to the

condition of the bowels, relaxation was the rule; from two to four bowel-movements daily being the average, which they consider normal. Constipation is rare.

Diseases of the lungs and heart seem uninfluenced by excessive libations of beer. The kidneys are rendered active; the urine passed is light in color, of a low specific gravity, and profuse in quantity. Cirrhotic kidney and hob-nail liver, so common in the whiskey-drinker, are not found in the beer-drinker.

In eighty cases of acute alcoholism and delirium tremens occurring in laborers in breweries 75 per cent. were consuming from six to eight drinks of whiskey or brandy in addition to their beer. Cases of delirium tremens were usually heavy beer-drinkers with occasionally "Schnapps," who by and by found too little stimulation in beer, cast it aside and drank stronger alcoholic liquor altogether, until the direst results followed. It is seldom that one finds a pure beer-drinker affected with delirium tremens; oftener acute alcoholism is encountered, and in these cases there is an additional element, as bad home-surroundings or a vicious taint of the system.

I have had under observation a few brewers, rather laborers in a brewery, for fifteen years who drank on an average from twenty-five to fifty glasses of beer daily, in the aggregate from one to two gallons for each sixteen or eighteen hours, and at no time have they been ill or suffered any of the evil consequences of excessive libations. None drank anything but beer, using no tobacco and eating three hearty and well-prepared meals a day. Otherwise they were of good habits, obtaining

ample sleep, cleanly, and of a favorable family history. They are yet strong, and capable of great labor. Others living under similar conditions, accustomed to the mixing of their drinks, excessive use of tobacco, have long ago fallen by the wayside.

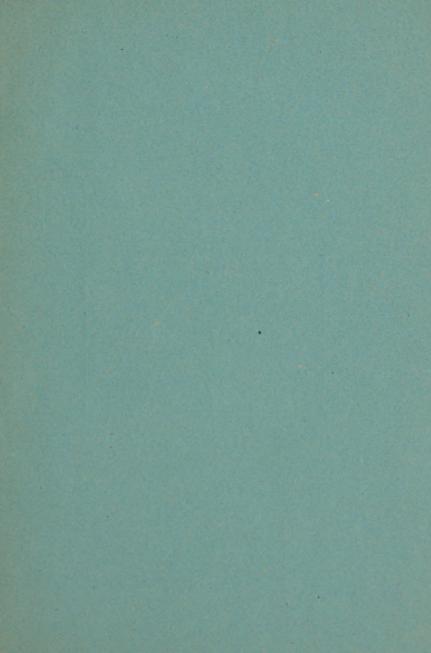
Many brewers have a vicious habit of drinking numerous glasses of beer before breakfast, and when such a one returns to his home for breakfast at six or seven in the morning his appetite is impaired. The sudden withdrawal of beer in a simple beer-drinker does not produce the violent nerve-agitation that occurs under the same conditions in the whiskey-drinker. He frets and longs for his beverage, but, soon used to abstinence, eats more heartily, becomes paler, and at no time is there marked irritability or peevishness.

Beer taken in moderate quantities under physiologic conditions produces plethora—a decided increase of red corpuscles; therefore, in anemia and impaired nutrition, I have found from one to two pints daily, taken with or after meals, or with a light lunch between meals, of decided benefit.

In the foregoing conditions I have, in conjunction with beer, given the tincture of the chlorid of iron, and especially have the results been striking in nursing women, in whom not alone was there an increase in the mammary flow but a richer milk and an improved appearance of the suckling. In a series of experiments I have given plain beer to a number of nursing women and then added iron in an equal number; comparative observations showed that there was in the latter number not only an improvement in the mother's milk, but also in the

mother and in the nursling. In women debilitated by protracted nursing and in whom it seemed necessary to wean their babies in the early part of the summer, this treatment has made it possible to prolong the nursing through the hot months and has kept the mother in a fair condition, by reason of which she was able to secrete ample milk and give her child proper care. There is a quantitative and qualitative change in the milk, besides an improved condition of the mother. The quantity taken should be one pint per day for the first week, then two or more pints per day during the nursing period, with fifteen drops of the tincture of ferric chlorid to each pint of beer. Some women unused to beer find difficulty in taking this quantity, despite their intense eagerness to feed their young, but by icing it and drinking during meals tolerance and taste are acquired.

In the puerpera, when on the fifth or sixth day there seems to be a tardy flow of milk, I have ordered this treatment with advantage; and as late as the tenth day, when all hope of obtaining breastmilk had been abandoned, the beer was pushed, and, conjoined with the stimulating effect of the infant nursing, led to the secretion of a satisfactory supply of milk. In very fat women everything fails to stimulate the flow of milk, even a temporary increase due to the beer declining in a few days.



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